



POWER SOLID

The Crown of Power Solution

Power Solid Battery
PS-12180-HR
12V, 18Ah

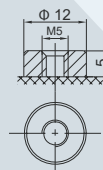
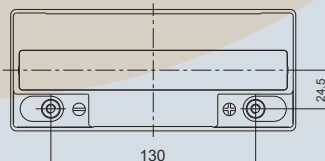
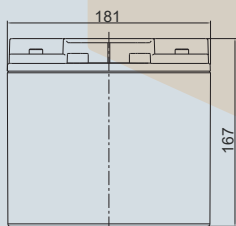
General Features

PS (High Rate) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 8 years design life in float service. By using strong grids, thick plate and specially designed active material. It is with lower I.R, lower self discharge rate, high power, and longer service life. The HR series battery offers 30% more power output than the standard series. It is suitable for high power standby used, such as datacenter, UPS, EPS etc.

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	80W@15min-rate to 1.67V per cell @25°C
Weight	Approx.6.20Kg (Tolerance $\pm 5\%$)
Internal Resistance	$\leq 12.0 \text{ m}\Omega$ (Full Charge Condition @25°C)
Terminal	Default F13-BP(M5)
Max. Discharge Current	200A (5 sec)
Short Circuit Current	900A
Design Life	8 years
Max. Charging Current	6 . 0A
Reference Capacity	C ₁₀ 18.8Ah C ₂₀ 20.0Ah
Standby Use Voltage	13.5 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/ Cell
Cycle Use Voltage	14.1 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/ Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C $\pm 5^\circ\text{C}$
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



F13-BP TERMINAL

Length	181 $\pm$ 1.5mm (7.13 inches)
Width	77 $\pm$ 1.5mm (3.03 inches)
Height	167 $\pm$ 1.5mm (6.57 inches)
Total Height	167 $\pm$ 1.5mm (6.57 inches)
Terminal	Value
M5	6- 7 N·m
M6	8- 10 N·m
M8	10- 12 N·m

Unit: mm



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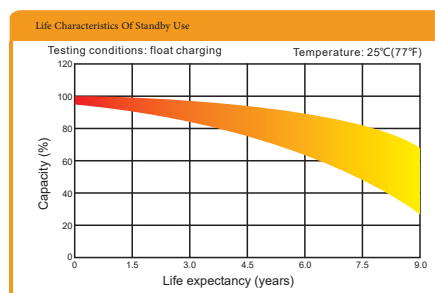
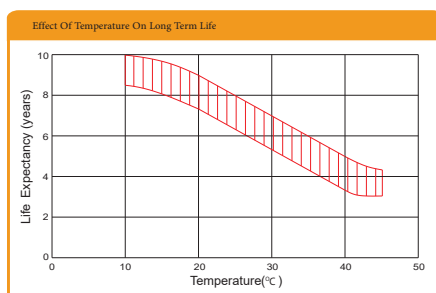
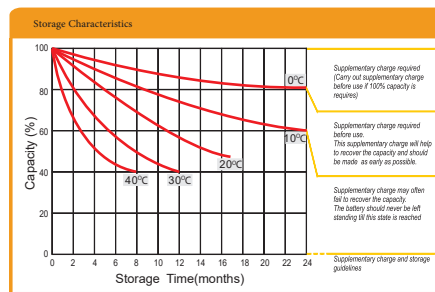
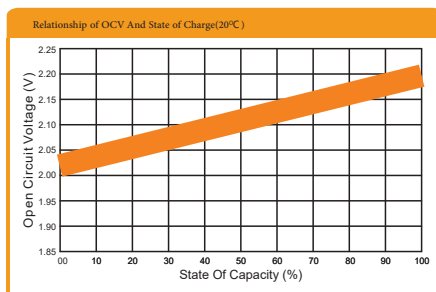
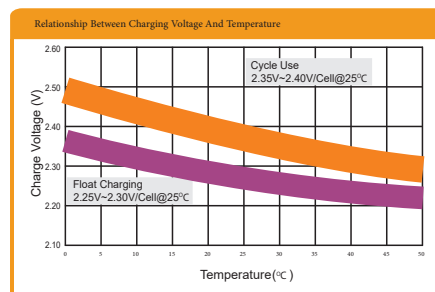
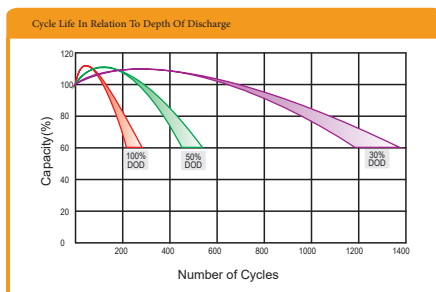
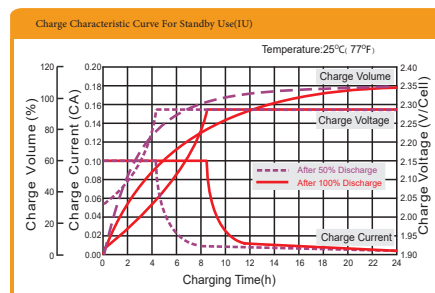
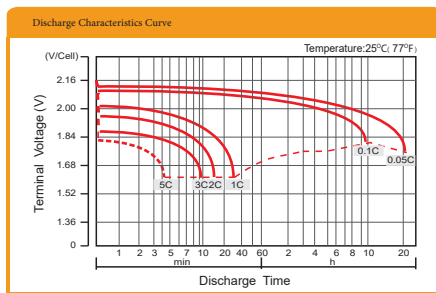
Constant Current Discharge Characteristics : A (25°C)

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	93.88	82.53	67.41	59.04	46.33	36.42	25.95	14.55	10.32
1.67V	85.20	74.89	61.64	54.42	43.33	34.38	24.59	13.87	9.874
1.70V	81.52	71.66	59.19	52.44	42.00	33.46	23.98	13.57	9.689
1.75V	75.51	66.37	55.14	49.14	39.67	31.79	22.98	13.11	9.395
1.80V	69.16	60.79	50.97	45.85	37.67	30.29	21.97	12.62	9.063
1.85V	59.14	51.98	43.42	38.92	32.30	26.31	19.43	11.41	8.289

Constant Power Discharge Characteristics : W/Cell (25°C)

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	168.7	148.3	121.6	106.9	84.67	67.05	47.96	27.28	19.53
1.67V	155.0	136.3	112.7	99.94	80.00	63.99	46.17	26.26	18.86
1.70V	149.7	131.6	109.1	96.97	78.33	62.62	45.09	25.84	18.57
1.75V	140.0	123.1	102.7	92.02	74.67	60.24	43.66	25.12	18.09
1.80V	130.0	114.2	96.11	86.74	71.33	57.86	42.23	24.40	17.61
1.85V	112.9	99.27	83.05	74.54	62.00	50.71	37.58	22.21	16.17

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.



(Note) All above information shall be changed without prior notice, Powersolid reserves the right to explain and update the information.

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